REMARKS

By this Amendment, Applicant amends claims 10, 11, 46, and 47 to more appropriately define the present invention.¹ Claims 1, 3-38, and 40-81 remain currently pending.

In the Office Action, the Examiner rejected claims 1-5, 10-13, 15-17, 20, 21, 27, 38-42, 46-50, 52-54, 57, 58, 62, and 74-81 under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 6,226,744 to Murphy et al. ("Murphy") in view of U.S. Patent Publication No. 2004/0006695 to Ishibashi et al. ("Ishibashi") and U.S. Patent Publication No. 2002/0026578 to Hamann et al. ("Hamann");2 rejected claims 6, 9, 18, 22, 23, 43, 51, 55, 59, 60, and 66 under 35 U.S.C. § 103(a) as unpatentable over Murphy in view of Ishibashi and Hamann, and further in view of U.S. Patent No. 7,085,840 to de Jong et al. ("de Jong"); rejected claims 7, 8, 44, and 45 under 35 U.S.C. § 103(a) as unpatentable over Murphy in view of Ishibashi, Hamann and de Jong, and in further view of U.S. Patent No. 6,715,082 to Chang et al. ("Chang") and U.S. Patent No. 6,067,621 to Yu et al. ("Yu"); rejected claims 19, 24, 26, 56, and 61 under 35 U.S.C. § 103(a) as unpatentable over Murphy in view of Ishibashi and Hamann, and further in view of U.S. Patent No. 6,257,486 to Teicher et al. ("Teicher"); rejected claims 25, 36, 37, 72, and 73 under 35 U.S.C. § 103(a) as unpatentable over Murphy in view of <u>Ishibashi</u> and <u>Hamann</u>, and further in view of U.S. Patent No. 6,192,131 to Geer, Jr. et al. ("Geer"); rejected claims 28-31, 34, 63-65, 67, and 68 under 35 U.S.C. § 103(a) as unpatentable over Murphy in view of Ishibashi, Hamann, de Jong,

¹ Support for the amendments may be found at, for example, page 7 of the specification.

² Applicant notes that claims 2 and 39 were cancelled by Applicant's amendment filed on May 4, 2007. Therefore, the rejection of claims 2 and 39 is most and not addressed in this response.

Chang, and Yu, and further in view of U.S. Patent No. 6,732,278 to Baird, III et al. ("Baird"); and rejected claims 32, 33, 35, and 69-71 as under 35 U.S.C. § 103(a) as unpatentable over Murphy in view of Ishibashi, Hamann, de Jong, Chang, Yu, and Baird, and further in view of U.S. Patent No. 6,792,536 to Teppler ("Teppler").

Applicant respectfully traverses the rejection of claims 1, 3-5, 10-13, 15-17, 20, 21, 27, 38, 40-42, 46-50, 52-54, 57, 58, 62, and 74-81 under 35 U.S.C. § 103(a) as unpatentable over Murphy in view of Ishibashi and Hamann.

To establish obviousness based on a combination or suggestion of prior art, "Office personnel must articulate . . . a finding that the prior art included each element claimed, although not necessarily in a single prior art reference, with the only difference between the claimed invention and the prior art being the lack of actual combination of the elements in a single prior art reference." M.P.E.P. § 2143.A.

Independent claim 1 recites a combination including, for example, "one or more input means for receiving one or more digital certificates, . . . [and] a processing component for authenticating the one or more received digital certificates using the at least one stored CA public key."

The Office Action alleges that <u>Murphy</u> at col. 5, lines 52-65 teaches these features of claims 38 and 1.⁴ See Office Action at 3. Applicant respectfully disagrees.

³ The Office Action contains a number of statements reflecting characterizations of the related art and the claims. Regardless of whether any such statement is identified herein, Applicant declines to automatically subscribe to any statement or characterization in the Office Action.

⁴ The Examiner only addresses claim 38 and indicates that "[claim 1] is rejected along similar rationale [to that of claim 38]." (Office Action at 11.)

In the portion cited by the Examiner, Murphy teaches that "[s]mart card 10 stores user information provided by the CA.... Smart card 10 also performs data encryption and decryption functions, stores DES secret keys and digital certificates, and will generate and store public and private RSA cryptographic key pairs. Smart card 10 has an on-board math co-processor that performs the key generation and encryption/decryption calculations." Murphy, column 5, lines 55-65, emphases added.

However, nowhere does <u>Murphy</u> mention that smart card 10 includes "one or more input means for <u>receiving one or more digital certificates</u>, . . . [and] a processing component for <u>authenticating the one or more received digital certificates</u> using the at least one stored CA public key," as recited in claim 1 (emphases added).⁵

In fact, <u>Murphy</u> fails to teach or suggest, as well as <u>teaches away from</u>, using smart card 10 for "receiving one or more digital certificates" or "authenticating the one or more received digital certificates," as recited in claim 1. <u>Murphy</u> explicitly states that "[a]uthentication is accomplished by sending messages from the network (e.g., an Internet web site) to the users's PC to interrogate the smart card." <u>Murphy</u>, column 4, lines 3-7, emphasis added.

Indeed, <u>Murphy</u> specifically uses a secure gateway server to perform authentication:

Client computer 14 uses a web browser to access secure gateway server 18 via WWW 16 at step 56. Secure gateway server 18 initiates authentication of the user of smart card 10 using authentication module 32. Authentication module 32 determines whether smart card 10 is present in client terminal 14. If smart card 10 is present in client terminal 14,

⁵ The Examiner "note[d] the PAD is interpreted to be equivalent to a smart card." (Office Action at 3.)

then authentication module 32 initiates <u>a download of a</u> smart card interface module to client terminal 14 at step 58.

Murphy, column 6, lines 8-15, emphases added.

Ishibashi fails to cure the deficiencies of Murphy. Ishibashi teaches that "[a]n issue certificate having a parent-card digital signature is stored in the child card, the issue certificate contains a service code and a child-card identification, and thus it becomes possible to confirm a service set in the child card based on the issue certificate as the parent-card signature data." Ishibashi, Abstract. However, Ishibashi fails to teach or suggest the above listed features of claim 1.

Hamann fails to cure the deficiencies of Murphy and Ishibashi. Hamann teaches "a secure import of certificates into a security token and their secure usage by applications." (Hamann, para. [0015].) "Preferably, the verification of the user certificate is then even possible during the off-line operation by using the extracted trusted public key of the CA stored on the token." Hamann, para. [0017], emphasis added. However, Hamann's mere teaching of a security token storing a user certificate for off-line operation" does not constitute the above-quoted features of claim 1.

Further, <u>Hamann</u>'s teaching of "off-line" operation of user verification is <u>contrary</u> to <u>Murphy</u>'s requirement of network-based user authentication. Thus, <u>Murphy</u> and <u>Hamann</u> cannot be combined in a rejection under 35 U.S.C. § 103. Indeed, <u>Hamann</u> does not teach and is not operable for "an output means for outputting the at least one service key," as recited in claim 1.

Therefore, Murphy, Ishibashi, and Hamann fail to teach or suggest all elements of claim 1. Accordingly, Applicant respectfully requests withdrawal of the Section 103

rejection of claim 1. Further, because claims 3-5, 10-13, 15-17, 20, 21, 27, and 74-77 depend from claim 1, these claims are also allowable for at least the same reasons stated above.

In addition, claims 3-5, 10-13, 15-17, 20, 21, 27, and 74-77 recite allowable subject matter. For example, amended claim 10 recites "wherein the at least one storage medium comprises at least one component for storing a PAD private key associated with the PAD and used by the PAD to authenticate the PAD to a user" (emphasis added.)

None of Murphy, Ishibashi, and Hamann mentions any concept of "storing a PAD private key associated with the PAD and used by the PAD to authenticate the PAD to a user."

Also for example, claim 12 recites "wherein the processing component comprises at least one component for <u>signing the at least one service key using the stored PAD</u> <u>private key</u>" (emphasis added.) None of <u>Murphy</u>, <u>Ishibashi</u>, and <u>Hamann</u> mentions signing any service key or a stored PAD private key.

Therefore, Applicant also requests withdrawal of the Section 103 rejection of claims 3-5, 10-13, 15-17, 20, 21, 27, and 74-77 for this additional reason.

Further, independent claim 38 recites similar features to those of claim 1. Claim 38 is thus also allowable for at least the same reasons as stated above with respect to claim 1. Applicant also requests withdrawal of the Section 103 rejection of claim 38 and claims 40-42, 46-50, 52-54, 57, 58, 62, and 78-81, which depend from claim 38.

Applicant respectfully traverses the rejection of claims 6, 9, 18, 22, 23, 43, 51, 55, 59, 60, and 66 under 35 U.S.C. § 103(a) as unpatentable over Murphy in view of

Ishibashi, Hamann, and de Jong; the rejection of claims 7, 8, 44, and 45 under 35 U.S.C. § 103(a) as unpatentable over Murphy in view of Ishibashi, Hamann, de Jong, Chang, and Yu; the rejection of claims 19, 24, 26, 56, and 61 under 35 U.S.C. § 103(a) as unpatentable over Murphy in view of Ishibashi, Hamann, and Teicher; the rejection of claims 25, 36, 37, 72, and 73 under 35 U.S.C. § 103(a) as unpatentable over Murphy in view of Ishibashi, Hamann, and Geer; the rejection of claims 28-31, 34, 63-65, 67, and 68 under 35 U.S.C. § 103(a) as unpatentable over Murphy in view of Ishibashi, Hamann, de Jong, Chang, Yu, and Baird; and the rejection of claims 32, 33, 35, and 69-71 as under 35 U.S.C. § 103(a) as unpatentable over Murphy in view of Ishibashi, Hamann, de Jong, Chang, Yu, Baird, and Teppler. As explained in Applicant's previously-filed Responses, de Jong, Chang, Yu, Teicher, Geer, Baird, and Teppler fail to cure the deficiencies stated above with respect to Murphy, Ishibashi, and Hamann, as recited in claim 1 and similarly recited in claim 38, whether these references are taken alone or in any combination. Accordingly, Applicant respectfully requests withdrawal of the Section 103(a) rejections of dependent claims 6-9, 18, 19, 22-26, 28-37, 43-45, 51, 55, 56, 59, 60, 61, and 63-73.

In view of the foregoing amendments and remarks, Applicant respectfully requests reconsideration of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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